

Title (en)
Fire sprinklers.

Title (de)
Löschbrause.

Title (fr)
Tête extinctrice.

Publication
EP 0310439 A1 19890405 (EN)

Application
EP 88309141 A 19880930

Priority
GB 8723226 A 19871002

Abstract (en)
A fire sprinkler (1) has a flow passage (3) for water or other extinguishing fluid closed by a frangible body (4), which may be a simple disc. A separate mechanism responsive to temperature-rise conditions shatters the frangible body (4), and the fluid then flows from the passage (3) to impinge on a distributor (5) (as in conventional sprinklers). The shattering mechanism is preferably actuated by a shape-memory alloy, preferably in sheet form (11), which can be located below the distributor (5) for maximum exposure to radiant as well as convective heat; it can also be thermally insulated, contributing further to speed of response.

IPC 1-7
A62C 37/18; F16K 31/00; F16K 17/40; F03G 7/06

IPC 8 full level
A62C 37/10 (2006.01); **A62C 37/11** (2006.01); **F03G 7/06** (2006.01); **F16K 17/40** (2006.01); **F16K 31/00** (2006.01)

CPC (source: EP US)
A62C 37/10 (2013.01 - EP US); **F03G 7/065** (2021.08 - EP US)

Citation (search report)
• [X] GB 2187951 A 19870923 - TOTAL FEUERSCHUTZ GMBH
• [Y] EP 0131997 A1 19850123 - LEUVEN RES & DEV VZW [BE]
• [A] US 3834463 A 19740910 - ALLARD R, et al
• [A] AU 480300 A 19750227

Cited by
US6073700A; CN113357416A; EP0630663A1; US5505266A; EP1079105A1; EP0680774A1; US5555940A; US10124197B2; US10190199B2; US10610620B2; US11040230B2; WO2008092028A1

Designated contracting state (EPC)
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